

PROJECT DESCRIPTION

I. General

This portion of the project involves the installation of a traffic control signal with intersection street lighting at the intersection of MD 108 and Snowden River Parkway. MD 108 is assumed to run in an east-west direction.

II. Intersection Operation

This intersection is proposed to operate in a fully actuated mode with MD 108 westbound and eastbound left turn lanes operating in an exclusive/permissive phase. Northbound / southbound Snowden River Parkway left turns shall operate in an exclusive phase each. Northbound and Southbound Snowden River Parkway shall operate concurrently.

A NEMA (8 phase) fully actuated controller housed in a base mounted cabinet with four - 4 channel track mounted loop detector amplifiers shall be installed at this location.

III. Special Notes

1. The following contact persons for District #7 are as follows:

Mr. Robert Fisher  
District Engineer  
(301)694-2145

Mr. John Concannon  
Asst. District  
Engineer - Traffic  
(301)694-2592

Mr. Jim Brown  
Utility Engineer  
(301)694-2025

Mr. Richard Daff  
Chief, Traffic  
Operations Division  
(410)787-7630

Mr. Leon King  
Asst. District Engineer - Maintenance  
(301) 694-1966

2. Maintenance of traffic will be handled by the contractor utilizing the following standard plates for traffic control: 105.00, 105.01, 105.02, 105.03, 105.03, 105.101, 105.103, 105.105, 105.107, 105.109

EQUIPMENT LIST

B. Equipment to be furnished and/or installed by the Contractor.

Item No.	Quantity	Units	Specification Section	Description
	12	CY	801	Furnish and install concrete for signal foundation.
	5	EA	804	Furnish and install ground rod - 3/4 in. diameter x 10 ft.
	35	LF	805	Furnish and install 4 in. schedule 80 rigid PVC conduit - Trenched.
	410	LF	805	Furnish and install 3 in. schedule 80 rigid PVC conduit - Trenched.
	150	LF	805	Furnish and install 3 in. schedule 80 rigid PVC conduit - bored.
	1400	LF	805	Furnish and install 2 in. schedule 80 rigid PVC conduit - trenched.
	100	LF	805	Furnish and install 1 in. liquid tight flexible non-metallic conduit for detector wire sleeve.
	2	EA	806	Furnish and install 250 Watt high pressure sodium lamp and luminaire with photo cell
	1	EA	807	Furnish and install control and distribution equipment.
	800	LF	810	Furnish and install No. 6 AWG standard bare copper ground wire.
	60	LF	810	Furnish and install electrical cable 1- conductor No. 4 AWG - THHN/THWN
	3400	LF	810	Furnish and install electrical cable - 2 conductor (Aluminum shielded).
	60	LF	810	Furnish and install electrical cable - 5 conductor (No. 14 AWG).
	3300	LF	810	Furnish and install electrical cable - 7 conductor (No. 14 AWG).
	4200	LF	810	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).
	510	LF	810	Furnish and install 2 - conductor - Tray cable (No. 12 AWG).
	15	EA	811	Furnish and install electrical handhole.
	128	SF	813	Install overhead sign - for signals.
	178	SF	813	Install ground mounted sign
	14	EA	814	Install signal head - mast arm mount.
	1700	LF	815	Furnish and install saw cut for signal.
	1	EA	816	Install eight phase (fully actuated) controller and cabinet - base mount.
	2	EA	829	Furnish and install a 27 ft steel pole with a 50 ft mast arm (Note: Four - 2 in. x 90 in. anchor bolts).
	1	EA	829	Furnish and install 27 ft steel pole with 70 ft mast arm (Note: Four - 2 in. x 90 in. anchor bolts).
	1	EA	829	Furnish and install 27 ft steel pole with 38 ft mast arm (Note: Four - 1 1/4 in. x 90 in. anchor bolts).
	2	EA	818	Furnish and install 20 ft lighting arm on signal structure
	1	LS	xxx	Removal and disposal of existing materials.
	120	LF	812	Furnish and install 4 in. x 6 in. wood post drilled.
	2	EA	xxx	Furnish and install microloop probe set with 1000 ft. Lead-in.

EQUIPMENT LIST

A. Equipment to be supplied by the Administration

Item No.	Quantity	Units	Specification Section	Description
	6	EA	814	12 in. 1 way 3 section (R,Y,G) signal head - mast arm mount.
	4	EA	814	12 in. 1 way 4 section (RA,YA,GA) signal head - mast arm mount.
	2	EA	814	12 in. 1 way 5 section (R,Y,G,YA,GA) signal head - mast arm mount.
	2	EA	814	Combination 8 in./12 in. 1 way 5 section (8 in. R,Y,G /12 in. YA,GA) signal head - mast arm
	1	EA	816	Eight-phase (fully actuated controller and cabinet) with systems package - base mount
	4	EA	xxx	Four channel loop detector amplifier(delayed output)
306		SF	813	Sheet aluminum signs consisting of:
	2	EA	xxx	R10-12, (36 in. x 42 in.) "Left Turn Yield on Green", -mast arm mount.
	4	EA	xxx	D3-2 (var x 16 in.) "SNOWDEN RIVER PKWY" sign - mast arm mount
	4	EA	xxx	D3-2 (var x 16 in.) "WATERLOO RD" sign - mast arm mount
	4	EA	xxx	Guide shield assembly 2'-EA (30" x 51") 2'-EA (48" x 75") Ground mount
	4	EA	xxx	W3-3, (36 in. x 36 in.) ground mount
	4	EA	xxx	R1-2 (36 in. x 36 in. x 36 in. ) "YIELD" sign - ground mount
	2	EA	xxx	R4-7 (24 in. x 30 in.) "KEEP RIGHT of MEDIAN" sign - ground mount
	3	EA	xxx	R3-5 (30 in. x 36 in.) "ONLY" sign - mast arm mount

DCI  
CONSULTING ENGINEERS  
COLUMBIA, MARYLAND

REVISIONS	APPROVALS	MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION MD 108 AT SNOWDEN RIVER PARKWAY GENERAL INFORMATION SHEET 2 OF 2			
	ASST. DIVISION CHIEF, TEDD	DATE 6 / / 98			
	ASST. DISTRICT ENGINEER, TRAFFIC	DRAWN BY: R CIOCHINI CHECK BY: D PETERS SCALE: NTS			
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	F.A.P. NO. SEE TITLE SHEET S.H.A. NO. HO-661-504-770 COUNTY HOWARD			
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY	PLAN SHEET NO.: 351.1 SHEET NO. 351.1 OF 441			